Investing in Portals for Benefits and Gains

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INTRODUCTION

Companies do not always have a rational justification for the choice they make between different IT investment alternatives. One may see the purchase as unavoidable expenditure, while another may see it as an investment and expect a return at least as high as the return on capital employed. There seems to be lack of useful methods to address the benefits and gains of IT investments, including various kinds of portal projects.

Studies published on the benefits and impact of IT have been criticized for not paying sufficient attention to the practical needs of companies. According to American professor Yolande Chan (2000), the assessment models presented in such studies have often focused on issues that are the easiest to model. Chan examined all articles published on the subject of benefiting from IT, in the period 1993-1998, in the main information systems science journals: *MIS Quarterly*, *Information Systems Research*, *Journal of Management Information Systems*, and *Communications of the ACM*. It was found that the published studies had concentrated purely on determining *what* benefits are gained in IT investments, and had not sought to consider the other questions of *why*, *where*, *when*, *how,* and *for whom* the benefits of such investments were achieved.

Success Factors at Operative Level

Despite Chan's justified criticisms, a closer examination of previously published studies can, nevertheless, give a comprehensive picture of the critical factors for successfully benefiting from IT. Perhaps the best-known study to distinguish itself in this field was published in 1992 by the American researchers William DeLone and Ephraim McLean (1992).

DeLone and McLean picked their way through 180 articles dealing with factors critical for successfully benefiting from IT use. They divided the concepts and indicators discussed in the material into six separate categories: system quality, information quality, use, user satisfaction, individual impact, and organizational impact. The level of scientific interest in what is, after all, a simple model has been substantial: in the 1990s, the article became one of the most widely quoted sources in many of the international conferences and journals on information systems science.

The first two of the six concepts together determine the next two that, supporting each other, then influence the company's overall outcome via their effect on the employees' actions. Different researchers have later discussed these concepts in their own studies, attaching varying degrees of significance to them. For instance, Brightwaite (1996) emphasizes the importance of system quality in stating, for example, that in corporate call centre services, employees cannot be expected to offer a service that is any better than that permitted by the information system at their disposal.

Portal Investment and Strategic Advantage

A frequently cited example in underlining the strategic importance of IT is the once pioneering SABRE reservations system of American Airlines (e.g., Copeland & McKenney, 1988). Being the first of its kind, the impact of this system could not have been foreseen. Once it was up and running in the first 200 travel agencies, it became clear that the airline's investment would pay for itself 500 times over during the first year alone. The opportunity that this presented for a reshuffle of the market and the competition rankings, or more specifically the airline's initiative in grasping this opportunity, led to monopoly accusations and, of course, confrontation with the aviation-sector regulations, which had been expanding alongside the growth in technology.

Not everybody has been convinced about the significance of this example for the textbooks, however. For instance, Nicholas Carr (2003), editor of the *Harvard Business Review*, would prefer to abandon the view that IT is somehow an all-powerful strategic force. Examining recent IT developments, he sees similarities with the spread of the railways in the 1840s to 1870s: the length of rail put down in that period followed a growth curve similar to that for the number of Internet servers installed in 1990-2002. Carr concluded that, although in both cases, the first companies to take up the opportunities offered by the new technology gained a competitive advantage strategically, once such technology becomes accessible to everyone, the wisest strategy may be to keep investment levels in check. In a similar vein, Professor David Avison (2002) has been keen to point out that most of the classic examples of strategic information systems, such as SABRE and the Federal Express system COSMOS, do not form a good basis for making generalizations, and

therefore, as examples, their strategic IT significance remains largely anecdotal.

The conclusions drawn by Copeland and McKenney (1988) appear to be very similar to those by Carr, at least when looked at retrospectively. They studied a company that was the first to exploit the opportunities offered by a particular technology market. One of the key factors in achieving a strategic advantage, they said, was intelligent persistence, a combination of opportunism and learning by doing, via which the company gained valuable experience that could not be easily emulated by competitors. However, they also noted that to retain this strategic advantage through the use of IT would require the company to engage in constant development work, and to rapidly identify emerging market opportunities (1988, p. 386): "Firms that begin to ride an experience curve ahead of their competitors realize a head start that will endure as long as new opportunities continue to be revealed. Technology can always be purchased, but the same can rarely be said for knowledge."

DISCUSSION

In IT projects, even careful investment planning is not always enough to guarantee the desired result. As an illustration of this, the investors behind the Web service Heavenly-doors.com declared, after a period of 5 months and a total expenditure of USD 26 million, that customers were not, after all, ready yet to make all their funeral arrangements over the Internet, starting with the choice of coffin (Remenyi, 2005). A further example, on a grander scale, is the investment made by European operators in third-generation mobile frequencies that has, both figuratively and literally, largely disappeared into thin air. At the macro level, this, at least superficially, points to the chronic nature of the IT productivity paradox (Brynjolfsson, 1993).

Examining how a company's IT use relates to its corporate strategies should be more important than looking at the use of IT in quantitative terms. Although this may be quite a demanding task, it should be done at the project planning stage. Whatever the corporate size or business sector, an organization, planning to invest, may have a range of strategies; for example, one for marketing, another for international growth, and so on. In IT investment, the company's technology and business strategies will be the most important, and all other strategies should, in fact, be subordinated to the latter. Depending on the company's operating environment, its corporate strategies may cover different time horizons. For instance, the technology strategy may look ahead to the next 3-10 years, while the business strategy may have its sights on the immediate period, just 1-3 years from now. This is why justifying an investment on the basis of one strategy while basing profit expectations on perhaps a shorter-term view can blur the view of benefits and gains.

CONCLUSION

Decisions about sizeable IT investments are rarely made without taking on board the views of a wide range of stakeholders. The process may also be influenced by political criteria at the expense of rational justifications, which presents a challenge for the choice and use of evaluation methods. Making the decision for or against an investment is also a human process. The company's management may even find itself having to take decisions on the priority of one stakeholder over another in cases where there are overlapping or contradictory interests. Thus, it is understandable if the management find itself tempted to tip the scale in favor of unavoidable IT expenditure, rather than an IT investment, when justifying and categorizing varying IT system projects.

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